

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1. (previously presented) An isolated biopolymer marker peptide consisting of SEQ ID NO:1 or SEQ ID NO:2 diagnostic for Alzheimer's disease.

Claims 2-38. (cancelled)

Claim 39. (currently amended) A method for diagnosing Alzheimer's disease comprising:

- (a) obtaining a sample from a patient;
- (b) conducting mass spectrometric analysis on said sample in a manner effective to ~~maximize elucidation of discernible~~ elucidate essentially all peptide fragments contained therein; and
- c) comparing mass spectrum profiles of a peptide consisting of SEQ ID NO:1 or SEQ ID NO: 2 to mass spectrum profiles of peptides elucidated from said sample; wherein recognition of a mass spectrum profile in the sample displaying the ~~characteristic mass spectrum~~ profile of the mass spectrum profile for the peptide

consisting of SEQ ID NO:1 or SEQ ID NO: 2 is diagnostic for Alzheimer's disease.

Claim 40. (currently amended). The method of claim 39, wherein [[the]] said sample is an unfractionated body fluid or a tissue sample.

Claim 41. (previously presented). The method of claim 39, wherein said sample is selected from the group consisting of blood, blood products, urine, saliva, cerebrospinal fluid, and lymph.

Claim 42. (currently amended). The method of claim 39, wherein said mass spectrometric analysis is selected from the group of mass spectrometry procedures consisting of Surface Enhanced Laser Desorption Ionization (SELDI) ~~mass spectrometry (MS)~~, ~~Maldi Qq TOF~~, ~~MS/MS~~, ~~TOF-TOF~~, ~~ESI-Q-TOF~~ Matrix-Assisted Laser Desorption/Ionization quadropole quadropole time-of-flight (MALDI Qq TOF), multiple sequential mass spectrometry (MS/MS), sequential time-of-flight (TOF-TOF), electrospray ionization quadropole time-of-flight (ESI-Q-TOF) and ION-TRAP.

Claim 43. (previously presented). The method of claim 39, wherein said patient is a human.

Claim 44. (currently amended). An Alzheimer's disease diagnostic kit comprising: (a) a peptide consisting of SEQ ID NO:1 or SEQ ID NO: 2, and (b) [[and]] an antibody that binds to said peptide in a sample from a patient.

Claim 45. (currently amended). The Alzheimer's disease diagnostic kit of claim 44, wherein said antibody is immobilized on a solid support.

Claim 46. (currently amended). The Alzheimer's disease diagnostic kit of claim 44, wherein said antibody is labeled.